

Notice of Allowability

Application No.

09/821,126

Examiner

Kimbinh T. Nguyen

Applicant(s)

ROBERTSON ET AL.

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 04/28/05.
2. ☒ The allowed claim(s) is/are 1,3-23,25-43 and 45-79.
3. ☒ The drawings filed on 03/29/01, 28 April 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This action is responsive to amendment filed 04/28/05.
2. Claims 1, 3-23, 25-43, 45-79 are pending in the application.
3. The drawings were received on 04/28/05. These drawings are Figure 1.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

Claims 1, 23, 43, 64, 72-77, the prior art does not teach a workspace control system that provides a user with a viewing context comprising a position and orientation associated with states of workspace variables, at least one of the workspace variables coupled with the input drive control system, such that a selection of the at least one workspace variables allows for a single input motion of the user input device to change the state of the workspace variable and deselection of the workspace variable changes the position and orientation of the viewing context, wherein the change takes place over time such that the user is made aware of the change in position and orientation of the viewing context. wherein deselection of the user input device causes the position and orientation of the virtual body to glide down to a location within a viewing frustum along a ground plane in the 3D virtual workspace; and a travel control system that couples the at least one of the workspace variables to the input drive control system based on a navigation type, which comprises at least one of speed coupled flying, orbiting, object manipulation, ghost copy technique, possession navigation technique, inverse fog technique, inverse scaling technique, and ephemeral world compression.

Claims 78 and 79, the prior art does not teach reducing occlusions within the viewing context by transforming objects within a radius of a sphere located on the virtual body employing at least one of the inverse fog technique and the inverse scaling technique; compressing a pound plane of the 3D virtual workspace radially around the virtual body; displaying the radially compressed 3D virtual workspace including objects located behind the virtual body.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 09/821,126

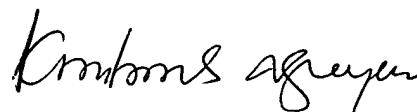
Page 4

Art Unit: 2671

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 10, 2005

A handwritten signature in black ink, appearing to read "Kimbinh T. Nguyen".

KIMBINH T. NGUYEN
PRIMARY EXAMINER